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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,559	04/22/2004	Asher Hazanchuk	ALT.P030 (A1252)	6357
27296 LAWRENCE N	7590 07/16/200 <b>1. CHO</b>	8	EXAMINER	
P.O. BOX 2144			DO, CHAT C	
CHAMPAIGN,	IL 01023		ART UNIT	PAPER NUMBER
			2193	
			MAIL DATE	DELIVERY MODE
			07/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/829,559	HAZANCHUK ET AL.		
Examiner	Art Unit		
CHAT C. DO	2193		

	CHAT C. DO	2193	
The MAILING DATE of this communication appea	ars on the cover sheet wit	h the correspondence add	ress
THE REPLY FILED <u>01 July 2008</u> FAILS TO PLACE THIS APPL	ICATION IN CONDITION F	OR ALLOWANCE.	
1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following rapplication in condition for allowance; (2) a Notice of Appe for Continued Examination (RCE) in compliance with 37 Coperiods:	eplies: (1) an amendment, a al (with appeal fee) in comp	affidavit, or other evidence, v liance with 37 CFR 41.31; o	which places the r (3) a Request
<ul> <li>a) The period for reply expires 3 months from the mailing date of this Action on event, however, will the statutory period for reply expire la Examiner Note: If box 1 is checked, check either box (a) or (b) MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f)</li> </ul>	lvisory Action, or (2) the date so ter than SIX MONTHS from the o). ONLY CHECK BOX (b) WHE	mailing date of the final rejection	on.
Extensions of time may be obtained under 37 CFR 1.136(a). The date of have been filed is the date for purposes of determining the period of extender 37 CFR 1.17(a) is calculated from: (1) the expiration date of the sleet forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	ension and the corresponding a nortened statutory period for rep	mount of the fee. The appropri- oly originally set in the final Office	ate extension fee be action; or (2) as
<ol> <li>The Notice of Appeal was filed on A brief in compl filing the Notice of Appeal (37 CFR 41.37(a)), or any exten Notice of Appeal has been filed, any reply must be filed with AMENDMENTS</li> </ol>	sion thereof (37 CFR 41.37	(e)), to avoid dismissal of the	
3. The proposed amendment(s) filed after a final rejection, b  (a) They raise new issues that would require further con  (b) They raise the issue of new matter (see NOTE below  (c) They are not deemed to place the application in bett	sideration and/or search (se v);	ee NOTE below);	
appeal; and/or  (d) They present additional claims without canceling a converse NOTE: (See 37 CFR 1.116 and 41.33(a)).			
4. The amendments are not in compliance with 37 CFR 1.12 5. Applicant's reply has overcome the following rejection(s):	·		
<ol> <li>Newly proposed or amended claim(s) would be allow non-allowable claim(s).</li> <li>For purposes of appeal, the proposed amendment(s): a) [</li> </ol>			
how the new or amended claims would be rejected is provi The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: <u>1,3 and 5-22</u> . Claim(s) withdrawn from consideration:		Mill be entered and an e	хріанацон оі
AFFIDAVIT OR OTHER EVIDENCE			
<ol> <li>The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).</li> </ol>			
9. The affidavit or other evidence filed after the date of filing a entered because the affidavit or other evidence failed to over showing a good and sufficient reasons why it is necessary	ercome <u>all</u> rejections under	appeal and/or appellant fail	s to provide a
10.  ☐ The affidavit or other evidence is entered. An explanation REQUEST FOR RECONSIDERATION/OTHER	of the status of the claims a	after entry is below or attach	ed.
<ol> <li>The request for reconsideration has been considered but See Continuation Sheet.</li> </ol>	does NOT place the applica	ation in condition for allowan	ce because:
<ul><li>12. ☐ Note the attached Information <i>Disclosure Statement</i>(s). (I</li><li>13. ☐ Other:</li></ul>	PTO/SB/08) Paper No(s)		
	/Chat C. Do/		
	Primary Examiner,	Art Unit 2193	

Continuation of 11. does NOT place the application in condition for allowance because: The applicant argues in pages 11-16 for claims rejected under 35 U.S.C. 101 that the claims do transform an article to a different state and produce a useful, tangible and concrete result wherein the transforming of an article to a different state is seen as producing a summing scaled product of the input operands and the result of the methods is achieved without having to employ a DSP capable of multiplying at least the total number of bits of the two numbers.

The examiner respectfully submits that the applicant does not fully address every rejection made in the Office action, particularly the preemption of every substantial practical application of the idea embodied by the claims wherein producing summing scaled product is widely seen or applied in most applications. In response to the above argument, producing a summing scaled product by summing the partial products and scale the intermediated result is not a transformation to a different state, rather it is just a mathematical transformation. The input is a set of number and the output is just another set of number wherein the another set of number is the summing scaled product of the set of number. In addition, the alleged feature of producing a summing scaled product of the input operands without having to employ a DSP capable of multiplying at least the total number of bits of the two numbers is not explicitly or directly seen in the claims.

The applicant argues in pages 16-21 for claims rejected under 35 U.S.C. 103(a) as being unpatentable over Bhandal in view of Schier that the secondary reference by Schier teaches away from the combination with the primary reference by Bhandal, in particular Schier does not disclose the additional shifting operations after the multiplications in FPGA. Further, there is no suggestion or motivation to make the proposed modification in order to properly combine the references.

The examiner respectfully submits that the secondary reference by Schier only needs to cite or provide the missing element(s) from the primary reference in order to arrive the claiming invention. The secondary reference does not need to show every limitations cited in the claims such as additional shifting operations after the multiplications in FPGA. In generally, the primary reference shows most of elements in the claimed invention except the FPGA and the second product is retrieved from a memory. These two missing elements are wellknown in the art of the technology and widely used in many practial application as clearly seen in the secondary reference in Figures 1-4. Thus, it is properly and reasonably to combine the references to meet every limitations in the claimed invention. The secondary reference does not explicitly state that the general combination by the examiner is not permitted, rather it is just the applicant's allegation. Nowhere in the specification of the secondary reference explicitly states that the FPGA and second product is retrieved from a memory CANNOT combine with other configurations, particularly the configuration cited in the primary reference. In addition, the motivation or suggestion is clearly provided in the Office action as the combination would enable to improve the system performance in further with KSR.

The applicant argues in pages 21-22 for claim 18 rejected under 35 U.S.C. 103(a) that the cited secondary reference does not disclose the missing feature as the DSP, the memory, the adder reside on a FPGA as applied in the rejection by the Examiner. The examiner respectfully submits that Figures 1-4 and abstract of the secondary reference clearly disclose the above missing feature as FPGA wherein the FPGA includes the DSP for processing/filtering, the memory for storing, and the adder for adding.